

6BQ7A

Medium-Mu Twin Triode

9-PIN MINIATURE TYPE

For TV Tuners Using Direct-Coupled Cathode-Drive Circuits

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

| | | |
|------------------------------|-----|-------|
| Voltage (AC or DC) | 6.3 | volts |
| Current | 0.4 | amp |

Direct Interelectrode Capacitances:^a

| | Unit No.1 | Unit No.2 | |
|---|------------|-----------|------------------|
| Grid to plate | 1.2 | 1.2 | $\mu\mu\text{f}$ |
| Grid to cathode, internal shield, and heater. | 2.6 | - | $\mu\mu\text{f}$ |
| Cathode to grid, internal shield, and heater. | - | 5 | $\mu\mu\text{f}$ |
| Plate to cathode, internal shield, and heater. | 1.2 | - | $\mu\mu\text{f}$ |
| Plate to grid, internal shield, and heater. | - | 2.2 | $\mu\mu\text{f}$ |
| Plate to cathode. | 0.12 | 0.12 | $\mu\mu\text{f}$ |
| Heater to cathode | 2.6 | 2.6 | $\mu\mu\text{f}$ |
| Plate of unit No.1 to plate of unit No.2. | 0.010 max. | | $\mu\mu\text{f}$ |
| Plate of unit No.2 to plate and grid of unit No.1 | 0.024 max. | | $\mu\mu\text{f}$ |

Characteristics, Class A₁ Amplifier (Each Unit):

| | | |
|--|------|------------------|
| Plate Supply Voltage. | 150 | volts |
| Cathode Resistor. | 220 | ohms |
| Amplification Factor. | 38 | |
| Plate Resistance (Approx.). | 5900 | ohms |
| Transconductance. | 6400 | μmhos |
| Plate Current | 9 | ma |
| Grid Voltage (Approx.) for plate $\mu\text{a} = 100$ | -6.5 | volts |

Mechanical:

| | |
|---|--|
| Operating Position. | Any |
| Maximum Overall Length. | 2-3/16" |
| Maximum Seated Length | 1-15/16" |
| Length, Base Seat to Bulb Top (Excluding tip) | 1-9/16" \pm 3/32" |
| Diameter. | 0.750" to 0.875" |
| Dimensional Outline | See <i>General Section</i> |
| Bulb. | T6-1/2 |
| Base. | Small-Button Noval 9-Pin (JEDEC No.E9-1) |

← Indicates a change.



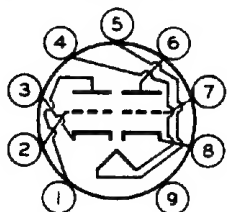
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DATA 1
1-62

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Basing Designation for BOTTOM VIEW. 9AJ

Pin 1 - Plate of
Unit No.2
Pin 2 - Grid of
Unit No.2
Pin 3 - Cathode of
Unit No.2
Pin 4 - Heater
Pin 5 - Heater



Pin 6 - Plate of
Unit No.1
Pin 7 - Grid of
Unit No.1
Pin 8 - Cathode of
Unit No.1
Pin 9 - Internal
Shield

AMPLIFIER — Class A₁

Values are for Each Unit

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE 250^b max. volts
PLATE DISSIPATION 2 max. watts
CATHODE CURRENT 20 max. ma

→ PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode. . 200^b max. volts
Heater positive with respect to cathode. . 200^c max. volts

Maximum Circuit Values:

Grid-Circuit Resistance 0.5 max. megohm

^a With external shield JEDEC No.315 connected to internal shield.

^b Under cutoff conditions in direct-coupled cathode-drive circuits, it is permissible for this voltage to be as high as 300 volts.

^c The dc component must not exceed 100 volts.

→ Indicates a change.

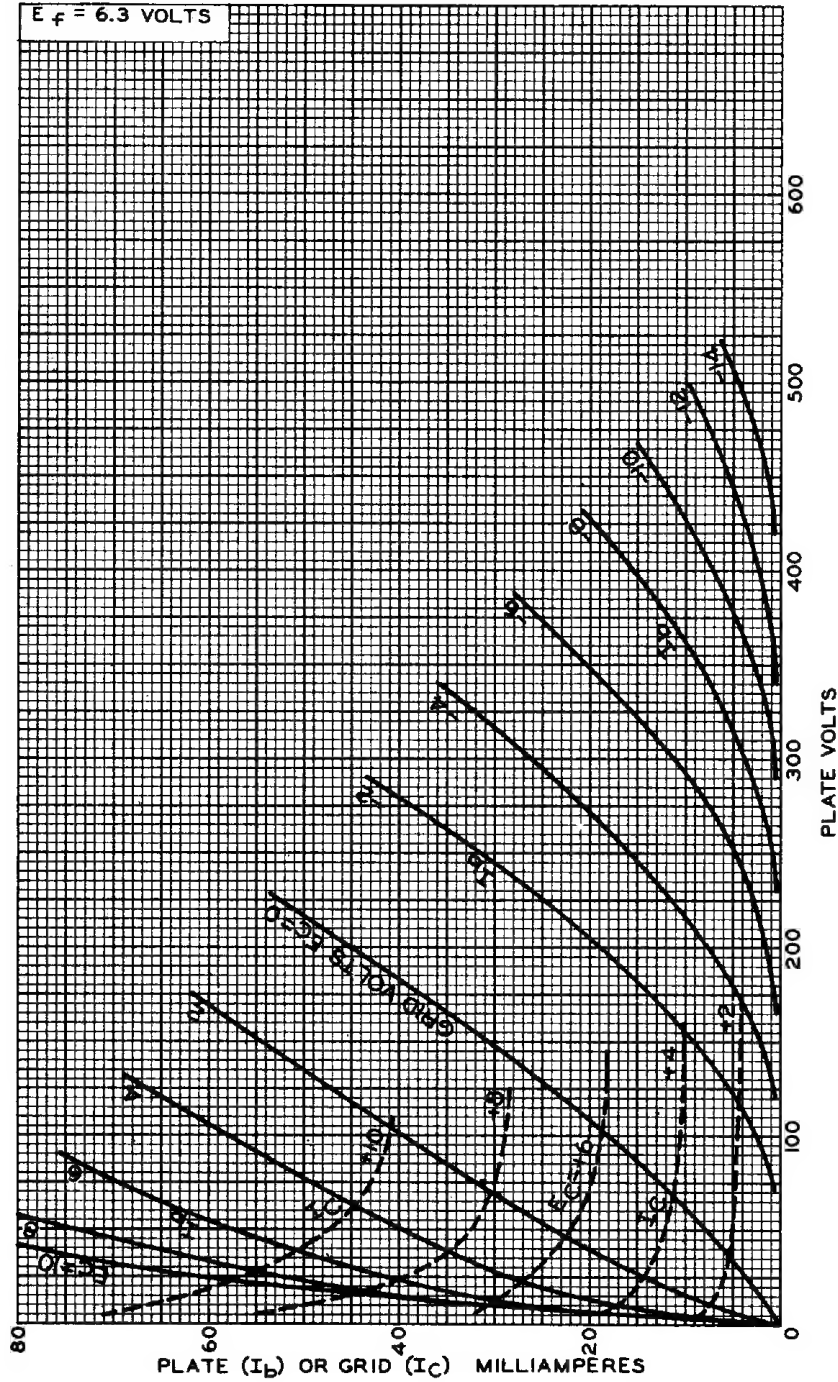
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AVERAGE CHARACTERISTICS Each Unit

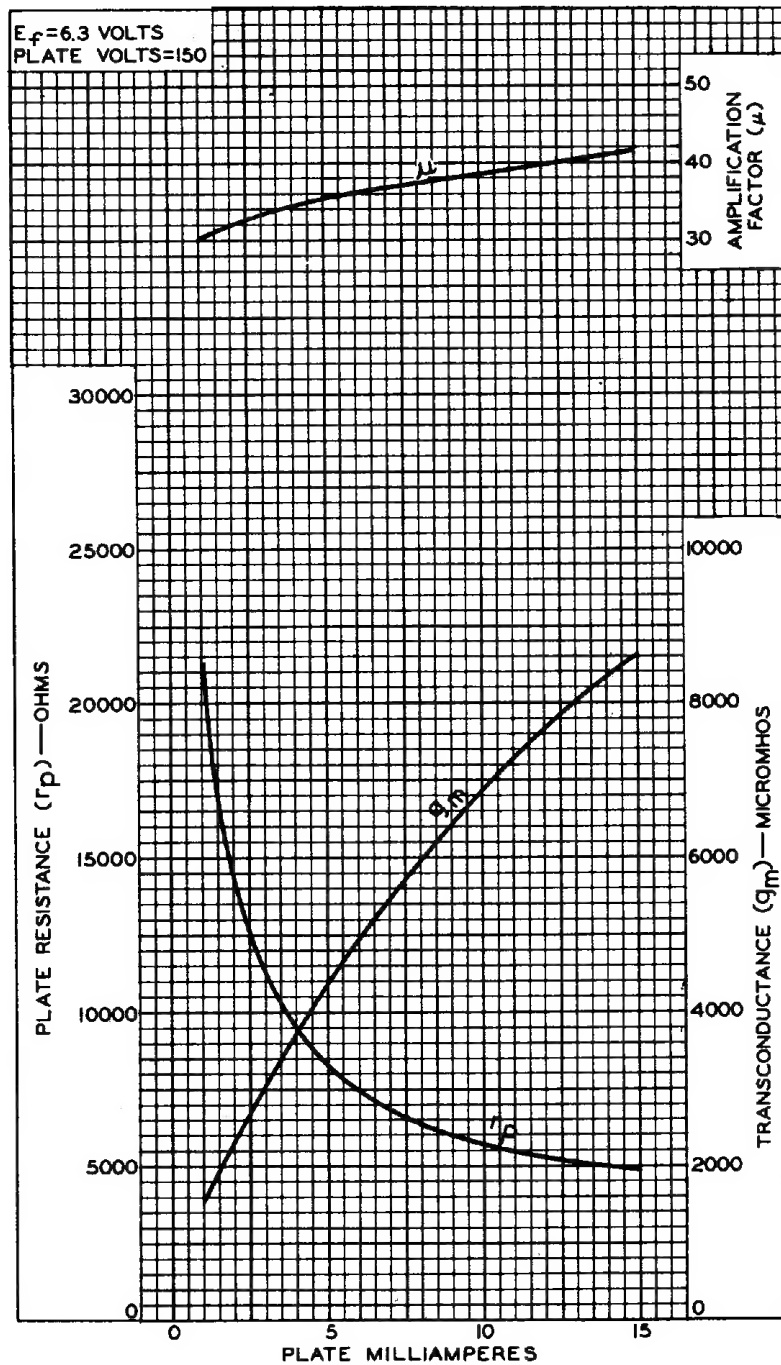


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DATA 2
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AVERAGE CHARACTERISTICS Each Unit



92CM-7538R2

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